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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/739,084	12/19/2003	Shunpei Yamazaki	0756-7232	9928
31780	7590	07/16/2007	EXAMINER	
ERIC ROBINSON			DUDEK, JAMES A	
PMB 955			ART UNIT	
21010 SOUTHBANK ST.			PAPER NUMBER	
POTOMAC FALLS, VA 20165			2871	
			MAIL DATE	DELIVERY MODE
			07/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/739,084

Applicant(s)

YAMAZAKI ET AL.

Examiner

James A. Dudek

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2007.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5,9,11,13,15,17 and 20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-5,9,11,13,15,17 and 20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 12/19/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/26/07.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 4-5, 9, 13, 15, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 20010022644 (644) in view of US 6300152 B1 (152).**

Per claims 1, 4, 9 and 20, 644 teaches a card comprising: a display device comprising a first semiconductor element comprising a first polycrystalline semiconductor film [TFT in pixel section and see paragraph 162]; a first thin film integrated circuit comprising a second semiconductor element comprising a second polycrystalline semiconductor film [the analog switch TFT]; a first plastic substrate [130 and paragraph 125]; and a second plastic substrate [135 and paragraph 126], wherein the display device is electrically connected to the first thin film integrated circuit [pixel 144 is connected to pixel TFT], wherein the thin film integrated circuit and the display device are sealed [with a passivation layer 146] between the first substrate and the second substrate of the card [see figure 18, passivation layer 146], and wherein the first substrate and the second substrate comprise a plastic material [see paragraph 125]. 644 lacks the thin film integrated circuit and the display device sealed with a resin. However, 152 teaches, at column 1, lines 23-25, acrylic resin used as a passivation layer to increase the aperture ratio of the LCD and flatness of the layer.

Per claim 5, 644 teaches a card of claim 1 further comprising a second integrated circuit wherein the first and second thin film integrated circuits are laminated [each TFT is by the passivation laminate 146].

Per claims 13, 15 and 17, 644 teaches a card according to claims 1, wherein the card is an IC card [see paragraph 179].

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**Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 20010022644 (644) in view of US 6300152 B1 (152) as applied to claims 1, 4-5, 9, 13, 15, 17 and 20 and further in view of US 4709991 A (991).**

Per claims 2, 644 teaches a card according to claim 1, but lacks the card having a thickness from 0.05 mm through 1.5 mm. Since 644 uses the display in an IC card it would have to be relatively thin and thus it was desirable to make the display as thin as possible. US 4709991 A teaches techniques to make such thin displays. Accordingly, it would have been obvious to one of ordinary skill at the time of invention to combine the techniques of 991 in order to create a cell between 0.005 mm and 1.5 mm in order to place the display in an IC card.

**Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 20010022644 (644) in view of US 6300152 B1 (152) as applied to claims 1, 4-5, 9, 13, 15, 17 and 20 and further in view of US 4709995 A (995).**

644 lack a passive matrix electrode structure. However, 995 teaches, at column 1, that a passive matrix electrode structure compared to active matrix has a lower production cost. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the passive matrix driving with 644.

of these limitations were well known because of the desire to create lighter cards, decrease manufacturing costs and reduce thickness by removing the light source, respectively.

**Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 20010022644 (644) in view of US 6300152 B1 (152) as applied to claims 1, 4-5, 9, 13, 15, 17 and 20 and further in view of US 6859195 B2 (195)**

644 lack the device being light emitting. However, 195 teaches at column 9, third paragraph that LCD and oled are interchangeable and that oled is self-emissive. Accordingly, it would have been obvious to one of ordinary skill at the time of invention to combine use a light emissive oled instead of an LCD.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

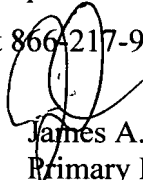
***Response to Arguments***

Applicant's sole argument is that 644 does not teach liquid crystal above the pixel region, i.e. the display region. However, it is inherent since the display/pixel region is an LCD. Thus, although not shown in the figure, there is a liquid crystal layer. Or the figure are just drawn incorrectly.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Dudek whose telephone number is 571-272-2290. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
James A. Dudek  
Primary Examiner  
Art Unit 2871